

DEVINE

BM-500
Professional studio recording microphone



User manual

Any information and illustrations shown in this user manual are subject to change without further notice.

User manual version: 1.0 Creation date + author initials: 27-01-2014 RV Revision date + author initials: 27-01-2014 RV

Introduction

Thank you for purchasing this Devine BM-500 broadcasting and recording microphone. Before you unpack all the received items, carefully read this manual to become familiar with the functions of the microphone. Also check the contents of the box to make sure all necessary parts are included. If the microphone fails to operate properly, or if you have any problems while using it, disconnect it and contact your local dealer for more information and help.



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Box contents

Box contents:

1x Devine BM-500 microphone
1x black windscreens
1x shockmount
1x storage/transport case with foam inlay

Unit and accessory inspection

- If the unit is not going to be used for a longer period of time, disconnect it and store it in a dust-free environment.
- Always check the unit for possible damage before use. If you suspect that something is wrong with the unit, do not connect it! When you suspect that your unit is broken or damaged, contact your local dealer or a certified technician to inspect the unit.

Note: Illustrations shown in this manual may vary from the actual product.



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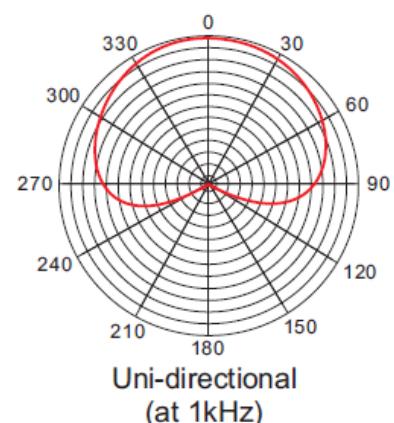
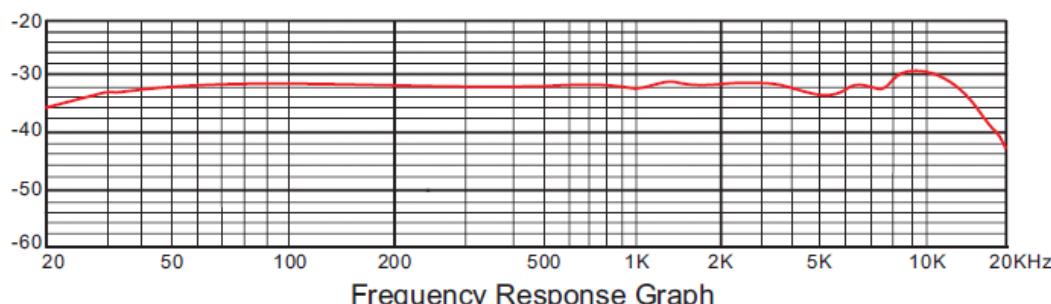
Use of the microphone

The Devine BM-500 studio microphone is suitable for most recording applications in your studio.

The Devine BM-500 has an unidirectional (cardioid) polar pattern. This is the most used polar pattern for most vocal and instrument recording applications. Most of the sound is captured at the front of the microphone, while reducing pickup of sound at the sides and especially the rear. This is the best choice when you use (studio)monitors directly behind the microphone, to avoid feedback problems when using live monitoring.

The BM-500 microphone is equipped with gold plated diaphragm capsule, to improve the sound to a warm, pleasant character. Most of the bodywork has a gold-coloured finish to match perfectly with the sound characteristics.

The polar pattern and frequency response of the microphone are visible in the figures below:



The BM-500 microphone has a slight boost in the higher frequencies (around 10 kHz) for clear vocal recording.

IMPORTANT: Phantom power

This large-diaphragm studio condenser microphone requires +48V phantom power from a PA-mixer, studio-mixer, audio-interface or phantom power supply. Consult the manual of your equipment or contact your local dealer when in doubt if your equipment is capable of providing a +48V voltage.

This microphone will not work properly when there is no proper +48V voltage activated. Always check this if you suspect that your microphone might be damaged or broken.

Protect your microphone:

This Devine microphone is equipped with very sensitive electronics to provide optimal audio performance. Make sure the microphone is not exposed to severe shocks, collision, drops from high altitude or any situations that may cause permanent damage. Improper use of the microphone is not covered by warranty. Always transport the microphone in the original package, or in a flightcase with proper foam inlay. Transporting the microphone without proper protection may cause permanent damage and will not be covered by warranty.

Positioning and using the included accessories:

The BM-500 includes a shock mount and windscreens for optimal audio performance. Devine recommends to always use the included shock mount, to prevent audio distortion and background or handling noise. The included windscreens are optional and are mostly used when recording outdoor. The windscreens break up airflow, which prevents distortion.

Connect your microphone to a mixer or audio interface:

This microphone uses a 3-pin XLR connector for connection with your mixer or audio-interface (cable not included). It is recommended to check the settings on your audio equipment before connecting the microphone. Check your equipment for the following settings:

Mixer/Audio interface:

- Gain set to the 0-point (in the most final counter-clockwise position)
- Compression/lowcut settings positioned in the off or most neutral position
- EQ settings on the most neutral position
- Pan/Balance settings on the most neutral position
- Volume fader or potentiometer set to the lowest possible position
- Phantom power in the 'on' position (mostly a button per channel, or a group of channels)

Microphone:

- Steady positioning on a microphone stand, with the included microphone clip
- Make sure the audio source (vocalist or instrument) is positioned as close as possible to the microphone

After you checked the settings above, you may start recording the audio source. Placing the audio source as near to the microphone as possible, provides the best audio quality and grants you the ability to reduce overall gain settings, which prevents audio feedback and noise.

Turn the volume parameter (potentiometer or fader) on the '0 dB' position for the best audio performance and slowly increase the gain, until slight clipping (mostly indicated with a (LED) VU meter or LED) or distortion is noticed.

Placement on a microphone stand or boom arm

The shockmount of the BM-500 microphone is equipped with a 5/8" thread, suitable for most microphone stands. If your microphone stand has 3/8" thread, adapters can be purchased separately. For easy positioning, mount the shockmount with the thread mount before mounting the microphone.

The logo consists of the word "DEVINE" in a bold, sans-serif font. The letters are a light grey color. Behind the letters is a circular graphic element composed of three concentric circles. The innermost circle is dark grey, the middle one is light grey, and the outermost one is a very light blue. The graphic is slightly offset to the right of the text.

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Troubleshooting

Problem	Possible Cause	Solution
No sound, or very low sound signal	No phantom power Volume set too low Microphone positioned too far away	Connect or activate phantom power supply Increase incoming volume and gain on your mixer, interface or other sound processing device Place the microphone closer to the sound source
Rattling and cracking sounds	Moist inside the microphone	Let the microphone dry on room temperature and avoid use of the microphone in humid or moist environments. Do not let the microphone come in contact with water or liquids.
Loud high frequencies coming from the speakers	Microphone positioned too close to the speakers, which causes feedback	Move the microphone further away from the speakers, or change the position to prevent the microphone to be aimed directly at the speakers.
Interruption of the microphone signal	Loose cable or broken cable	Check if the cable is plugged into the microphone correctly. If that does not solve the problem, try to change the cable.
Distortion and/or noise in the captured sound	Too much airflow caused by vocal airflows Too much airflow caused by wind (outdoor use)	Use a pop filter (sold separately) Use the windscreens (included)

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Technical specifications

- large diaphragm condenser recording microphone
- cardioid (uni-directional) polar pattern
- 34mm pressure gradient transducer (gold-plated)
- high sensitivity for clear and detailed recordings
- low self noise
- wide dynamic range
- stylish appearance (matte black body, gold coloured parts and printing)
- +48V phantom power required

Details:

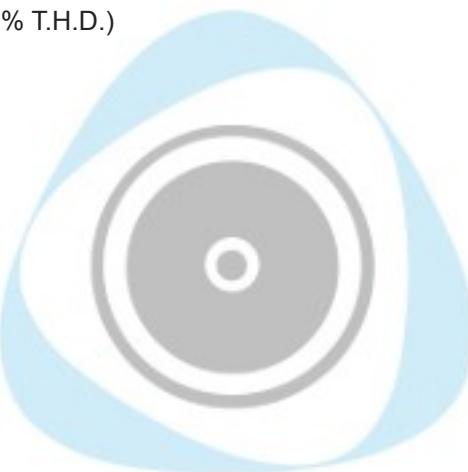
- frequency response: 20 Hz - 20 kHz
- sensitivity: -34 dB (+/- 2 dB) at 0dB = 1V/Pa on 1 kHz
- output impedance: 150 Ohms (+/- 30%) at 1 kHz
- load impedance: \geq 1000 Ohms
- self noise level: 16 dBA
- max. SPL: 132 dB (at 1 kHz, \leq 1% T.H.D.)
- S/N ratio: 78 dB
- +48V phantom power
- electrical current: 3 mA

Physical:

- dimensions: 46 x 46 x 150 mm
- weight: 346 g

Included accessories:

- shockmount with 5/8" thread
- black windscreens
- protective transport/storage case



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